Total number of printed pages-3

14 (GGY-1) 1036

#### 2023

### **GEOGRAPHY**

Paper: GGY-1036

(Climatology and Biogeography)

Full Marks: 80

Time: Three hours

The figures in the margin indicate full marks for the questions.

UNIT-I: Climatology

(Marks: 48)

# Group-I

Answer **any two** of the following questions: 16×2=32

1. Compare and contrast the sciences of meteorology and climatology. Discuss the sub-branches of climatology. How is scale important in the study of climatology?

4+8+4=16

Discuss how the atmosphere can be divided based on its thermal qualities. Discuss each one with a diagram.

3. Discuss the role of latitude as a climate control. How do the earth-sun relationships affect the spatial and temporal distribution of energy throughout the year in each hemisphere?

6+10=16

## Group-II

Answer **any two** of the following questions: 8×2=16

- 4. Why do the earth's wind system and pressure belts migrate with the season?
- 5. What is an El Nino? What are the impacts that it has on global weather?
- 6. Discuss the traditional and modern techniques of weather forecasting?

# UNIT-II: Biogeography

(Marks: 32)

## Group-III

Answer any one of the following questions:

16

7. What is biogeography? What are the questions that biogeographers seek to address? Elucidate your answer with examples from the persistent themes in biogeography.

3+5+8=16

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8. Draw a diagram of a soil profile. Discuss the characteristics of each layer in detail. 6+10=16

### Group-IV

Answer **any two** of the following questions: 8×2=16

- 9. Discuss the global biodiversity conservation efforts. Explain your answer citing at least two success stories from North-East India.
- 10. Discuss the development of National Forest Policies of India with its important milestones.
- 11. Write short notes on: (any two) 4×2=8
  - (a) Umbrella species
  - (b) Oriental bio-geographic regions
  - (c) Nitrogen cycle